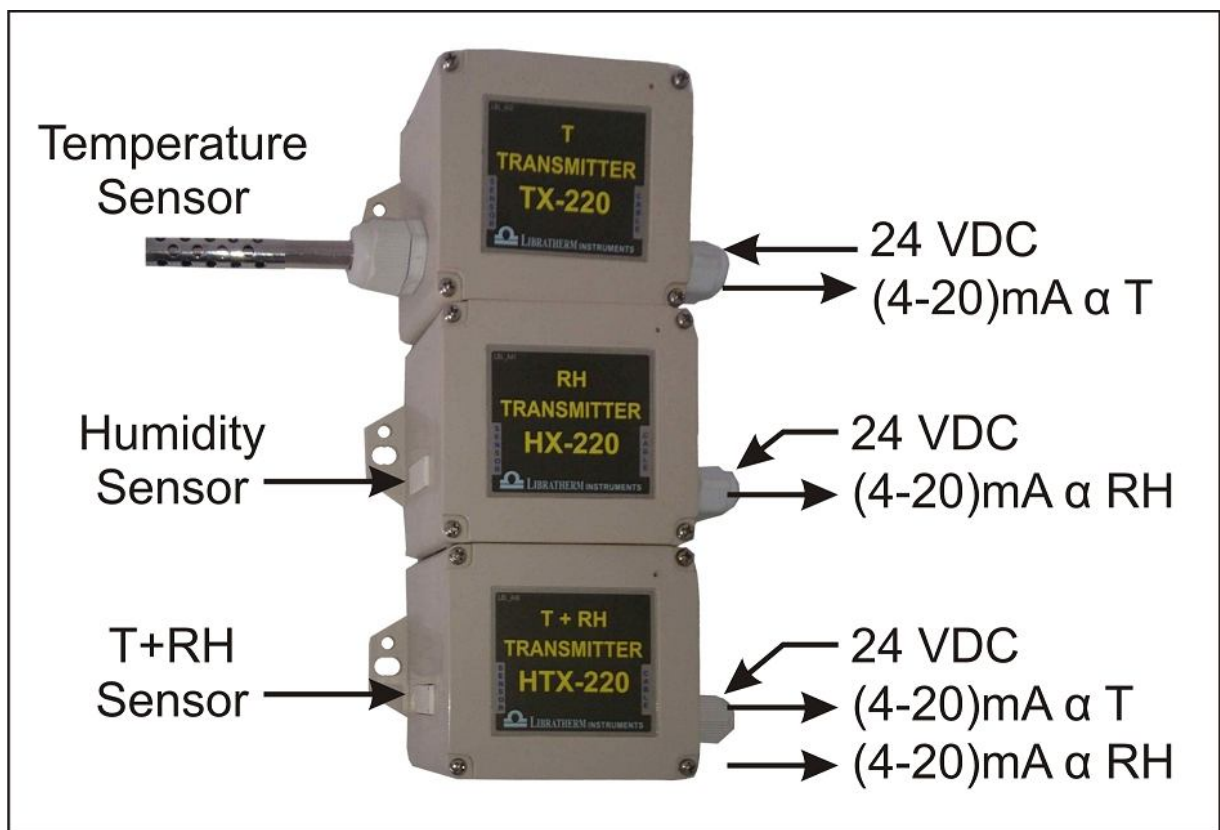
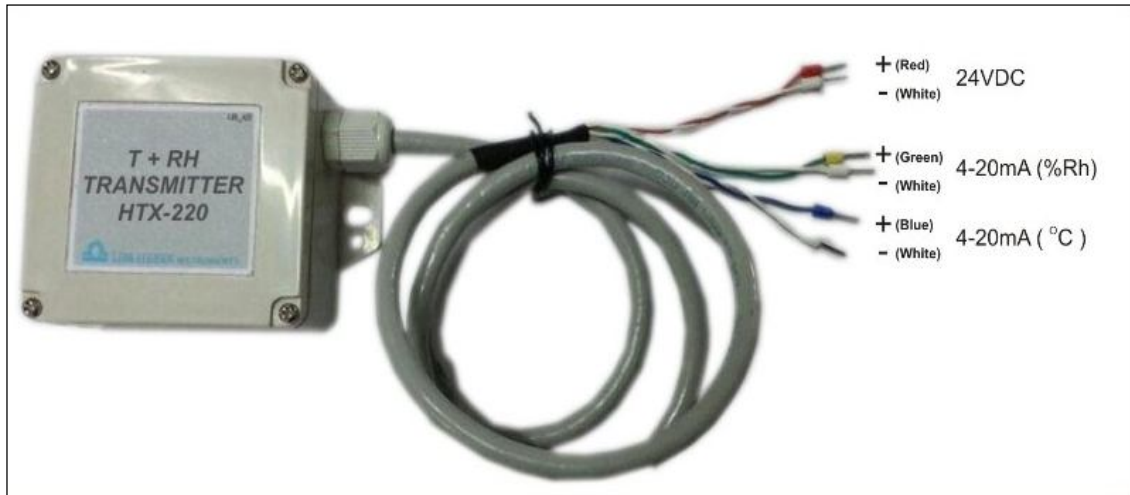
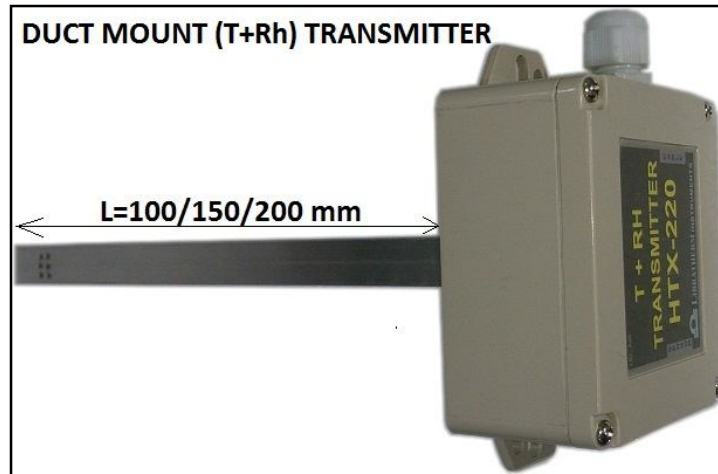


Temperature + Humidity Transmitter (Eco - Version)





Sr. No	Model	Product Description	Size h x w x d (mm.)
1	TX-220	Wall Mount Temperature Sensor and Transmitter with (8 x 75) mm Pt-100 sensor	76 x 70 x 38
2	HX-220	Wall Mount Humidity Sensor and Transmitter	76 x 70 x 38
3	HTX-220	Wall Mount Humidity + Temperature Sensor and Transmitter	76 x 70 x 38
4	HTX-220-DM-L	Duct Mount Humidity + Temperature Sensor and Transmitter (Steam Size = 10 x 20 x L mm) L = 100mm,150mm ,200mm	76 x 70 x 38

Product Description:

Libratherm offers low cost, rugged and reliable T + RH sensor cum Transmitter (model HTX-220) for sensing T + Rh in the environment and transmitting the analogue values (4-20)mA or (0-10)VDC proportional to both Temperature and Humidity. Normally, the signal generated by T+RH sensors are low in strength hence cannot be transmitted over very long distance and if done so the signal is likely to drop over very long cable which will result in the inaccurate measurement of temperature and %RH.

The transmitter featured here converts these low level signals from Pt-100 and Rh sensor to equivalent 4-20mA/0-10Vdc, which can be transmitted over a very long distance without loss of accuracy in the measurement. Dual 4-20mA proportional to T and %RH can be used for remote measurement and indication.

These transmitters operates on 24Vdc power supply and housed in an ABS plastic enclosure with perforation for sensing. The 24VDC supply and 4-20mA are galvanically isolated from each other and hence prevents any ground line interferences/loading effect, while connecting to any external measuring/controlling devices like DCS, PLC, BMS controller DDC or PID controllers.

Applications:

- HVAC / AHU / Humidifiers /Foggers and De-humidifiers
- Pharma Labs / Manufacturing Plants
- Data Center / Server rooms, Green Houses, Ware Houses etc...
- Textile Industries

Technical Specifications:

Item	T + Rh sensor cum Transmitter
Model	TX-220 / HX-220 / HTX-220 / HTX-220-DM-L
Built in Sensors	For Temp.: Pt-100 – Class A element For %Rh: Humidity sensor (made in Japan)
Temp. Range	0 to 60 °C
Temp. Output	4-20 mA/(0-10)VDC proportional to 0 to 60 °C (isolated from DC supply)
Temp. Accuracy	± 0.3 °C
RH Range	0 to 100%
RH Output	4-20 mA / (0-10)VDC proportional to 0 to 100%Rh (isolated from DC supply)
Operating range	10% to 90%Rh (5.6 to 18.4)mA / (1-9)Vdc
RH Accuracy	+/- 3% @ 25°C and 50% Rh
Load Resistance	RLmax = 400 Ohms @ 24VDC supply.
Isolation Voltage	Greater than 1.5KV (4-20mA/0-10VDC Output and Supply voltage are galvanically isolated)
Supply Voltage	24 VDC ± 10% @ 50mA max.
Type	Wall Mounted
Size	76 x 70 x 38 mm.
Enclosure	IP-65 ABS Plastic with wall mounting holes
Cable	6 core PVC/PVC insulated – 1 meter long with std. colour code
	Extra length of cable can be provided at additional cost.

Input / Output Schematic:

